Please add new claims 13-37 as follows:

--13. A method of improving mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having about the same number of hydrogen bonding sites as dextran.

14. A method of improving mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having sugar moieties that stereochemically complement the oligosaccharide moieties native to the respiratory tract mucins in the manufacture of a medicament to improve mucus clearance.

15. The method of claim 14, wherein the polysaccharide comprises oligomers of galactose and fucose and the amino sugars glucosamine and galactosamine.

16. The method of claim 13, wherein the polysaccharide is administered in admixture with a pharmaceutically acceptable diluent or carrier.

17. The method of claim 16, wherein the diluent is sodium chloride or ringer solution.

18. The method of claim 13, wherein the polysaccharide is administered to the respiratory tract topically or by aerosol.

19. The method of claim 13, wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.

20. The method of claim 14, wherein the polysaccharide is administered in admixture with a pharmaceutically acceptable diluent or carrier.

21. The method of claim 20, wherein the diluent is sodium chloride or ringer solution.

22. The method of claim 14, wherein the polysaccharide is administered to the respiratory tract topically or by aerosol.

23. The method of claim 14, wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.

24. A method of treating lung disease associated with impaired mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having about the same number of hydrogen bonding sites as dextran.

25. The method of claim 24, wherein the lung disease is cystic fibrosis, chronic bronchitis, bronchiectasis or bronchial asthma.

26. A method of treating lung disease associated with impaired mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having sugar moieties that stereochemically complement the oligosaccharide moieties native to the respiratory tract mucins in the manufacture of a medicament to improve mucus clearance.

27. The method of claim 26, wherein the polysaccharide comprises oligomers of galactose and fucose and the amino sugars glucosamine and galactosamine.

28. The method of claim 26, wherein the lung disease is cystic fibrosis, chronic bronchitis, bronchiectasis or bronchial asthma.

29. A method of improving mucus clearability in a patient having cystic fibrosis comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having about the same number of hydrogen bonding sites as dextran.

30. The method of claim 29, further comprising the step of assessing liquification of secretions of said patient following treatment.

31. The method of claim 29, further comprising the step of assessing viscosity and elasticity of sputum of said patient following the treatment.

32. The method according to claim 29, wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.

33. A method of improving mucus clearability in a patient having cystic fibrosis comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide having sugar moieties that stereochemically complement the oligosaccharide moieties native to the respiratory tract mucins in the manufacture of a medicament to improve mucus clearance.

34. The method of claim 33, wherein the polysaccharide comprises oligomers of galactose and fucose and the amino sugars glucosamine and galactosamine.

35. The method of claim 33, further comprising the step of assessing liquification of secretions of said patient following treatment.

36. The method of claim 33, further comprising the step of assessing viscosity and elasticity of sputum of said patient following the treatment.

37. The method according to claim 33, wherein the polysaccharide is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.--